Part No.	Replacement No.	Mfr.
PTC411 (Cont'd)		
	SDT411	3 SODI
	SVT7543	3 TRWS
PTC413		
	DTS413	2 DEL
	IR413	2 INR
	BUX82	3 PHIN
	D64VE4	3 GESY
	MJ413	3 MOTA
	RCA413	3 RCA
	SDT413	3 SODI
	SVT7533	3 TRWS
PTC423		
	DTS423	2 DEL
	IR423	2 INR
	BUX82	3 PHIN
	D64VE4	3 GESY
	MJ423	3 MOTA
	RCA423	3 RCA
	SDT423	3 SODI
	SVT7543	3 TRWS
PTC424		
	2N6902	2 MOTA
	DTS424	2 DEL
	IR424	2 INR
	2N6308	3 MOTA
	BUX83	3 PHIN
	D64VE4	3 GESY
	MJ424	3 MOTA
	SDT424	3 SODI
	SVT7543	3 TRWS
PTC425		
	DTS425	2 DEL
	IR425	2 INR
	2N6545	3 MOTA
	BUX83	3 PHIN
	D64VE5	3 GESY
	MJ425	3 MOTA
	SDT425	3 SODI
	SVT7544	3 TRWS
PTC430		
	DTS430	2 DEL
	IR430	2 INR
	SVT350-3	2 TRW
	2N6307	3 MOTA
	2N6545	3 MOTA
	BUX82	3 PHIN
	D64VE3	3 GESY
	D64VE4	3 GESY
	SDT430	3 SODI
	SDT13302	3 SODI
	SVT7543	3 TRWS
PTC431		
	DTS431	2 DEL
	IR431	2 INR
	SVT450-3	2 TRW
	2N6545	3 MOTA
	BUX82	3 PHIN
	D64VE4	3 GESY
	D64VE5	3 GESY
	MJ431	3 MOTA
	RCA431	3 RCA
	SDT431	3 SODI
	SDT14304	3 SODI
	SVT7543	3 TRWS
PTC515		
	2N6306	2 MOTA
	DTS515	2 DEL
	IR515	2 INR
	2N6250	3 MOTA
	BUW34	3 SGSI
	BUX22	3 APX
	BUX80	3 PHIN
	D64VP3	3 GESY
	DE283	3 DGE
	SDT515	3 SODI
	STI515	3 STI
	SVT7534	3 TRWS
	SVT7553	3 TRWS
	TIP554	3 TII
PTC516		
	DTS516	2 DEL
	IR516	2 INR
	2N6250	3 MOTA
	2N6306	3 MOTA
	SDT516	3 SODI
	STI516	3 STI
	SVT7553	3 TRWS
PTC517		
	DTS517	2 DEL
	IR517	2 INR
	2N6251	3 MOTA
	2N6306	3 MOTA
	SDT517	3 SODI
	STI517	3 STI
	SVT7553	3 TRWS
PTC518		
	DTS518	2 DEL
	IR518	2 INR
	2N6307	3 MOTA
	2N6546	3 MOTA
	STI518	3 STI
	SVT7553	3 TRWS
PTC519		
	2N6544	2 MOTA
	DTS519	2 DEL
	IR519	2 INR
	SVT300-5C	2 TRW
	BUS22A	3 APX
	BUX80	3 PHIN
	D64VP3	3 GESY
	DE283	3 DGE
	SDT519	3 SODI
	STI519	3 STI
	SVT7516	3 TRWS
	SVT7553	3 TRWS
	TIP535	3 TII
	TIP536	3 TII
	TIP558	3 TII
PTC520		
	2N6308	2 MOTA
	DTS520	2 DEL
	IR520	2 INR
	SVT350-5C	2 TRW
	2N6583	3 TRWS
	BUW35	3 SGSI
	BUX22A	3 APX
	BUX80	3 PHIN
	D64VP4	3 GESY
	DE283	3 DGE
	MJ13080	3 MOTA
	STI520	3 STI
	SVT7531	3 TRWS
PTC2000		
	EV1234	2 FUJI
	KS221K0510	2 WESY
	QM50DY2H	2 MITJ
	MJ50BX100	3 MOTA
PTC2010		
	EV1277	2 FUJI
	KS221K0310	2 WESY
	MG25MCK1	2 TOSJ
	QM30DY2H	2 MITJ
	MJ25BX100	3 MOTA
PTC2051		
	MJ10051	2 MOTA
PTC2052		
	MJ10052	2 MOTA
PTC2200		
	EVG31-050	2 FUJI
	KD224503	2 WESY
	QM30DY-H	2 MITJ
	EVG31-050	3 FEC
	MG3062CL2	3 TOSJ
	MJ30BD45	3 MOTA
	PTC2200-1	3 PTC
PTC2200-1		
	KD224503	1 WESY
	EVG31-050	3 FEC
	MG3062CL2	3 TOSJ
	QM30DY-H	3 MITJ
PTC2300-1		
	KD224575	1 WESY
	EVK71-050	3 FEC
	QM75DY-H	3 MITJ
PTC2400		
	EV31-050	2 FUJI
	KS52450510	2 WESY
	QM50DY-H	2 MITJ
	MJ50B2D45	3 MOTA
PTC2400-1		
	KD224505	1 WESY
	EVK31-050	3 FEC
	MG50G2CL2	3 TOSJ
	MJ50B2D45	3 MOTA
	PMD050PLA45	3 GESY
	PMD050PLA55	3 GESY
	QM50DY-H	3 MITJ
PTC4000		
	EV1298	2 FUJI
	KD4215K150	2 WESY
	MG150M2CK1	2 TOSJ
	QM150DY2H	2 MITJ
	KD421K15	3 WESY
	MJ150BK100	3 MOTA
	MJ150BX100	3 MOTA
PTC4100		
	EV1255	2 FUJI
	KD421K1010	2 WESY
	MG100M2CK1	2 TOSJ
	QM100DY2H	2 MITJ
	KD421K10	3 WESY
	MJ100BK100	3 MOTA
	MJ100BX100	3 MOTA
PTC4200		
	ETN81-055	2 FUJI
	KS621K2010	2 WESY
	MG200H2CK1	2 TOSJ
PTC4300		
	IDI300A120	2 FUJI
	KS621K3010	2 WESY
	MG300H2CK1	2 TOSJ
PTC6000		
	DTS4074	2 DEL
	GE6000	2 GESY
	IR6000	2 INR
	SVT6000	2 TRW
PTC6000 (Cont'd)		
	GE5062	3 GESY
	GE6060	3 GESY
	MJ10004	3 MOTA
	SDM6000	3 SODI
	STI4074	3 STI
	SVT6000	3 TRWS
PTC6001		
	DTS4039	2 DEL
	DTS4041	2 DEL
	DTS4075	2 DEL
	GE6001	2 GESY
	IR4039	2 INR
	IR6001	2 INR
	SVT6001	2 TRW
	GE5062	3 GESY
	GE6061	3 GESY
	MJ10000	3 MOTA
	MJ10004	3 MOTA
	PTC6002	3 PTC
	SDM4039	3 SODI
	SDM6001	3 SODI
	STI4039	3 STI
	STI4041	3 STI
	STI4075	3 STI
	SVT6001	3 TRWS
PTC6002		
	DTS4040	2 DEL
	DTS4041	2 DEL
	DTS4045	2 DEL
	DTS4059	2 DEL
	DTS4060	2 DEL
	DTS4061	2 DEL
	DTS4065	2 DEL
	GE6002	2 GESY
	IR4040	2 INR
	IR4041	2 INR
	IR4045	2 INR
	IR4050	2 INR
	IR4055	2 INR
	IR4059	2 INR
	IR4060	2 INR
	IR4061	2 INR
	IR4065	2 INR
	IR6002	2 INR
	MJ10000	3 MOTA
	MJ10001	3 MOTA
	MJ10005	3 MOTA
	PTC6001	3 PTC
	SDM4040	3 SODI
	SDM4041	3 SODI
	SDM4045	3 SODI
	SDM4050	3 SODI
	SDM4055	3 SODI
	SDM4059	3 SODI
	SDM4060	3 SODI
	SDM4061	3 SODI
	SDM4065	3 SODI
	SDM6002	3 SODI
	STI4041	3 STI
	STI4059	3 STI
	STI4060	3 STI
	STI4061	3 STI
	STI4065	3 STI
	SVT6002	3 TRWS
PTC6060		
	GE6060	2 GESY
	IR6060	2 INR
	SVT6060	2 TRW
	MJ10004	3 MOTA
	MJ10015	3 MOTA
	SDM6060	3 SODI
	SVT6060	3 TRWS
PTC6061		
	GE6061	2 GESY
	IR6061	2 INR
	SVT6061	2 TRW
	MJ10004	3 MOTA
	MJ10015	3 MOTA
	SDM6061	3 SODI
	SVT6061	3 TRWS
PTC6062		
	GE6062	2 GESY
	IR6062	2 INR
	SVT6062	2 TRW
	MJ10005	3 MOTA
	MJ10015	3 MOTA
	SDM6062	3 SODI
	SVT6062	3 TRWS
PTC6251		
	DTS4010	2 DEL
	GE6051	2 GESY
	IR6251	2 INR
	SVT6251	2 TRW
	GE6251	3 GESY
	MJ3041	3 MOTA
	MJ10006	3 MOTA
	SDM6251	3 SODI
	STI4010	3 STI
	SVT6251	3 TRWS
PTC6252		
	DTS4025	2 DEL
	DTS4026	2 DEL
	GE6052	2 GESY
PTC6252 (Cont'd)		
	IR6252	2 INR
	SVT6252	2 TRW
	GE6252	3 GESY
	MJ3041	3 MOTA
	MJ10006	3 MOTA
	MJ10007	3 MOTA
	MJ10012	3 MOTA
	SDM6252	3 SODI
	STI4025	3 STI
	STI4026	3 STI
	SVT6252	3 TRWS
PTC6253		
	GE6053	2 GESY
	IR6253	2 INR
	SVT6253	2 TRW
	MJ10007	3 MOTA
	SDM6253	3 SODI
	SVT6253	3 TRWS
PTC9000		
	GE10024	2 GESY
	MJ10024	2 MOTA
PTC9001		
	GE10025	2 GESY
	MJ10025	2 MOTA
PTC10000		
	GE5060	2 GESY
	GE5061	2 GESY
	GE5062	2 GESY
	GE10000	2 GESY
	MJ10000	2 MOTA
	BU931R	3 SGSI
	MJ10001	3 MOTA
	MJ10004	3 SGSI
	ST10000	3 STI
	SVT6060	3 TRWS
PTC10000P		
	MJE10000	2 MOTA
PTC10001		
	ECG98	2 PHIN
	GE10001	2 GESY
	MJ10001	2 MOTA
	BU931R	3 SGSI
	MJ10005	3 SGSI
	ST10001	3 STI
	SVT6061	3 TRWS
PTC10001P		
	MJE10001	2 MOTA
PTC10002		
	GE10002	2 GESY
	MJ10002	2 MOTA
	BU920P	3 SGSI
	ST10002	3 STI
	SVT6000	3 TRWS
PTC10003		
	ECG97	2 PHIN
	GE10003	2 GESY
	MJ10003	2 MOTA
	BU921P	3 SGSI
	ST10003	3 STI
	SVT6001	3 TRWS
PTC10004		
	GE10004	2 GESY
	MJ10004	2 MOTA
	ST10004	3 STI
	SVT6060	3 TRWS
PTC10005		
	GE10005	2 GESY
	MJ10005	2 MOTA
	ST10005	3 STI
PTC10006		
	GE10006	2 GESY
	MJ10006	2 MOTA
	ST10006	3 STI
	SVT6251	3 TRWS
PTC10007		
	GE10007	2 GESY
	MJ10007	2 MOTA
	ST10007	3 STI
	SVT6252	3 TRWS
PTC10008		
	GE10008	2 GESY
	MJ10008	2 MOTA
	ST10008	3 STI
	SVT6062	3 TRWS
PTC10009		
	GE10009	2 GESY
	MJ10009	2 MOTA
	ST10009	3 STI
PTC10015		
	GE10015	2 GESY
	MJ10015	2 MOTA
	ST10015	3 STI
PTC10016		
	GE10016	2 GESY
	MJ10016	2 MOTA
	ST10016	3 STI
PTC10020		
	GE10020	2 GESY
	MJ10020	2 MOTA
PTC10021		
	GE10021	2 GESY
	MJ10021	2 MOTA
PTC10022		
	GE10022	2 GESY
	MJ10022	2 MOTA
	ST10022	3 STI
PTC10023		
	ECG99	2 PHIN
	GE10023	2 GESY
	MJ10023	2 MOTA
	ST10023	3 STI
PTE081		
	MRF890	1 MOTA
PV210		
	SD1117HD	1 TOP
	VN0106N2	3 STX
PV211		
	SD1117HD	1 TOP
	VN0106N2	3 STX
PV212		
	SD1117HD	1 TOP
	VN0106N2	3 STX
QBA100A		
	KD324510	1 WESY
	EVL31-050	3 FEC
	QM100DY-H	3 MITJ
QCA30A		
	KD224503	1 WESY
	PTC2200	1 PTC
	EVG31-050	3 FEC
		FUJI
	MG3062CL2	3 TOSJ
	PTC2200-1	3 PTC
	QM30DY-H	3 MITJ
QCA50A		
	KD224505	1 WESY
	EVK31-050	3 FEC
	MG50G2CL2	3 TOSJ
	MJ50B2D45	3 MOTA
	PMD050PLA45	3 GESY
	PMD050PLA55	3 GESY
	PTC2400-1	3 PTC
	QM50DY-H	3 MITJ
QCA50H		
	PTC2400	1 PTC
	EV31-050	3 FUJI
	KS52450510	3 WESY
	QM50DY-H	3 MITJ
QCA100HA100		
	PTC4100	1 PTC
	EV1255	3 FUJI
	KD421K1010	3 WESY
	MG100M2CK1	3 TOSJ
	QM100DY2H	3 MITJ
QCA150H		
	PTC4000	1 PTC
	EV1298	3 FUJI
	KD4215K150	3 WESY
	MG150M2CK1	3 TOSJ
	QM150DY2H	3 MITJ
QM15TB-H		
	MJ15FG45	1 MOTA
QM30DX-H		
	MJ30BD45	1 MOTA
QM30DY2H		
	KD221K03	1 WESY
	MJ25BX100	1 MOTA
	PTC2010	1 PTC
	EV1277	3 FEC
		FUJI
	KS221K0310	3 WESY
	MG25MCK1	3 TOSJ
QM30DY-H		
	KD224503	1 WESY
	PTC2200	1 PTC
	EVG31-050	3 FEC
		FUJI
	MG3062CL2	3 TOSJ
	PTC2200-1	3 PTC
QM30HA-H		
	KS524503	1 WESY
	ESM10045	3 THC
	ETG81-050	3 FEC
	MG30G1BL3	3 TOSJ
	MJ10041	3 MOTA
QM40DY3H		
	MJ40BX140	1 MOTA
QM50DX-H		
	MJ50BD45	1 MOTA
QM50DY2H		
	KD221K05	1 WESY
	MJ50BX100	1 MOTA
	PTC2000	1 PTC
	EV1234	3 FUJI
	EV1234M	3 FEC
	KS221K0510	3 WESY
QM50DY24		
	MJ50BX120	1 MOTA
QM50DY-H		
	KD224505	1 WESY
	MJ50B2D45	1 MOTA
	PTC2400	1 PTC
	EV31-050	3 FUJI
	EVK31-050	3 FEC
	KS52450510	3 WESY
	MG50G2CL2	3 TOSJ
QM50DY-H (Cont'd)		
	PMD050PLA45	3 GESY
	PMD050PLA55	3 GESY
	PTC2400-1	3 PTC
QM50HA2H		
	KS221K05	1 WESY
	MJ10050	3 MOTA
QM50HA-H		
	KS524505	1 WESY
	D66DEDW	3 GESY
	ETK81-050	3 FEC
	MG5061BL3	3 TOSJ
	MJ10044	3 MOTA
	MJ10045	3 MOTA
QM50HU2H		
	MJ50AC100	1 MOTA
QM75DY2H		
	KD221K75	1 WESY
	MJ75BX100	1 MOTA
	S2903	3 TOSJ
QM75DY24		
	MJ75BX120	1 MOTA
QM75DY-H		
	KD224575	1 WESY
	MJ75B2D55	1 MOTA
	EVK71-050	3 FEC
	PTC2300-1	3 PTC
QM80DY3H		
	MJ80BX140	1 MOTA
QM100DX-H		
	MJ100BE55	1 MOTA
QM100DY2H		
	KD421K10	1 WESY
	MJ100BX100	1 MOTA
	PTC4100	1 PTC
	EV1255	3 FUJI
	EV1255-65M	3 FEC
	KD421K1010	3 WESY
	MG100M2CK1	3 TOSJ
	S2921	3 TOSJ
QM100DY24		
	MJ100BX120	1 MOTA
QM100DY-H		
	KD324510	1 WESY
	EVL31-050	3 FEC
QM100HA2H		
	KS221K10	1 WESY
	ET1255	3 FEC
QM100HA-H		
	KS224510	1 WESY
	D67FFP5.6.7	3 GESY
	ETL81-050	3 FEC
	MG100G1AL3	3 TOSJ
	MJ10100	3 MOTA
	SPK1300	3 SOD
QM150DY2H		
	KD421K15	1 WESY
	MJ150BX100	1 MOTA
	PTC4000	1 PTC
	EV1298	3 FEC
		FUJI
	KD4215K150	3 WESY
	MG150M2CK1	3 TOSJ
	S2904	3 TOSJ
QM150DY24		
	MJ150BX120	1 MOTA
QM150DY-H		
	KD324515	1 WESY
	MJ150B2D55	1 MOTA
	EVM31-050	3 FEC
	S2931	3 TOSJ
QM200HA2H		
	KS621K20	1 WESY
	MJ200AV100	1 MOTA
	ET1266M	3 FEC
	S2922	3 TOSJ
QM200HA24		
	MJ200AV120	1 MOTA
QM200HA-H		
	KS324520	1 WESY
	ETN81-050	3 FEC
	MG200H1FL1	3 TOSJ
	MJ10200	3 MOTA
QM300HA2H		
	KS621K30	1 WESY
	MJ300AV100	1 MOTA
	S2923	3 FEC
QM300HA24		
	MJ300AX120	1 MOTA
QM300HA-H		
	KS624530	1 WESY
	MJ300A2F55	1 MOTA
	S2920	3 TOSJ
R9G00718		
	A640S	2 GESY
R47M10		
	MHW709	1 MOTA
R47M13		
	MHW710	1 MOTA
R47M15		
	MHW710	1 MOTA
R50208		
	A177	1 GESY

1 - Mfr. Suggested 2 - Reverse of Mfr. Suggested 3 - Permutation of Mfr. Suggested